



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,059	12/18/2001	John C. Eidson	10010255	8596

7590 08/13/2004
AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER

PHAN, THANH S

ART UNIT	PAPER NUMBER
----------	--------------

2841

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/026,059

Applicant(s)

EIDSON ET AL. *OK*

Examiner

Thanh S Phan

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 21-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION***Election/Restrictions***

Newly submitted claims 21-26 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: applicant newly claims "structure for thermally isolating the electronic component from a set of other components of the circuit."

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 21-26 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 6, 12-15, 17, 18 and 20 are rejected under 35 U.S.C.

103(a) as being unpatentable over Luce et al. [US 4,008,564] in view of Akram [US 2001/0035577].

Regarding claims 1, 3, 12, 13, Luce et al. disclose an electronic watch system [figures 1-5] comprising a substrate [10], a liquid crystal display cell, an oscillator and at least one associated circuit element for operating the watch

Art Unit: 2841

system, and electronic components, wherein the electronic components are encapsulated by sealants/insulators formed of metal [10] or potting/ceramic material [column 4, lines 53-56].

Luce et al. disclose the instant claimed invention except for the at least one electronic element being disposed on a structure to increase the thermal mass thereof.

Akram discloses an electronic component [32] disposed onto a metal enclosure therefor to increase the thermal mass thereof [see abstract].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the enclosure design of Akram for the at least one electronic element of Luce et al. for the purpose of dissipating unwanted heat.

Claims 1, 4, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luce et al. [US 4,008,564] in view of Osada [US 2002/0191377].

Regarding claims 4, 12 and 13 Luce et al. disclose an electronic watch system [figures 1-5] comprising a substrate [10], a liquid crystal display cell, an oscillator and at least one associated circuit element for operating the watch system, and electronic components, wherein the electronic components are encapsulated by sealants/insulators formed of metal [10] or potting/ceramic material [column 4, lines 53-56].

Luce et al. disclose the instant claimed invention except for the at least one electronic element being disposed on a structure to increase the thermal mass thereof.

Art Unit: 2841

Osada discloses an electronic component [15] disposed onto a ceramic enclosure [19] therefor to increase the thermal mass thereof.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the enclosure design of Osada for the at least one electronic element of Luce et al. for the purpose of dissipating unwanted heat.

Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Luce et al., as modified, as applied to claim 1 above, and further in view of Khan et al. [US 2002/0185720].

Luce et al., as modified, disclose the instant claimed invention except for the structure being encased within an insulative material.

Khan et al. disclose a circuit element [102] including a heat spreader [502] encased in an epoxy material [116].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the encasing design of Khan et al. with Luce et al., as modified, for the purpose of providing mechanical and environmental protection.

Claims 14, 17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Luce et al., as modified, as applied to claim 1 above, and further in view of Kirkpatrick [US 2002/0186618].

Luce et al., as modified, disclose the instant claimed invention except for the clock circuit including means for communication via a network and means for synchronizing a local time value in a clock circuit in response to a set of messages transferred via by means of the network.

Art Unit: 2841

Kirkpatrick discloses a method of synchronizing a plurality of clock nodes [102, 104 and 106] via a network [figure 1].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the network synchronization design of Kirkpatrick with the clock of Luce et al., as modified, for the purpose of providing accurate time to each node.

Regarding claim 15, Luce et al., as modified, disclose the use of a crystal component [32].

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luce et al., as modified, as applied to claims 15, and further in view of Osada.

Regarding claim 18, Luce et al. disclose an electronic watch system [figures 1-5] comprising a substrate [10], a liquid crystal display cell, an oscillator and at least one associated circuit element for operating the watch system, and electronic components, wherein the electronic components are encapsulated by sealants/insulators formed of metal [10] or potting/ceramic material [column 4, lines 53-56].

Luce et al. disclose the instant claimed invention except for the at least one electronic element being disposed on a structure to increase the thermal mass thereof.

Osada discloses an electronic component [15] disposed onto a ceramic enclosure [19] therefor to increase the thermal mass thereof.

Art Unit: 2841

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the enclosure design of Osada for the at least one electronic element of Luce et al. for the purpose of dissipating unwanted heat.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luce et al., as modified, as applied to claim 15 above, and further in view of Khan et al.

Luce et al., as modified, disclose the instant claimed invention except for the structure being encased within an insulative material.

Khan et al. disclose a circuit element [102] including a heat spreader [502] encased in an epoxy material [116].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the encasing design of Khan et al. with Luce et al., as modified, for the purpose of providing mechanical and environmental protection.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is

Art Unit: 2841

filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh S Phan whose telephone number is 571-272-2109. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TULSIDAS PATEL
PRIMARY EXAMINER